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An Alternative Perspective

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Ariel Levite is affiliated with the Cornell Peace Studies Program and is a pre-doctoral fellow at the Center for International Security and Arms Control, Stanford University (1982-83). Athanassios Platias is affiliated with the Cornell Peace Studies Program.

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I. INTRODUCTION

This paper seeks to examine both the theory and empirical evidence regarding complex issues of power, influence, and more specifically, leverage in the context of the relationship between small states[1] and their arm suppliers. From Thucidides to Machiavelli to contemporary realists, power has been the pivotal concept in international relations theory. Power, influence, and leverage, however, are abstract concepts referring to complex phenomena that cannot be easily defined or circumscribed. Prolonged preoccupation with these concepts by philosophers, sociologists and political scientists has failed to produce commonly accepted definitions.[2] Still, we have to clarify these concepts before we can hope to study them empirically, as it is impossible to study a phenomenon and make a case for its absence or presence in a given situation without first specifying what it is. Thus, we shall deal at the outset with the development of working definitions of the concepts of power, influence and leverage. This shall be done on the basis of what Dorwin Cartwright has called an "inverse Gresham's Law,"[3] namely, that definitions are retained or rejected based on their ability to lend coherence and consistency to research efforts that employ them.

II. POWER, INFLUENCE, LEVERAGE: SOME THEORETICAL CONSIDERATIONS

Much of the existing literature on power can be conveniently summarized as dealing with it as either control over resources,[4] over actors,[5] or over outcomes.[6] The concept of power as control over resources assumes that capabilities can be treated as being homogeneous, in an analogy with money, since the possession of a single means (power) can be employed for a variety of purposes. For political realists like Wolfers, ". . . power and influence play the same role in international politics as money does in the market economy"[7] — the so-called "fungibility assumption."[8] This approach to power, however, is problematic, because it suggests that control over resources can be efficiently translated into control over actors and outcomes, which quite frequently may not be the case. As David Balwin puts it, "if there were some generalized means of exercising power—just as money is a generalized means of exercising purchasing power—the problem of conceiving and measuring political power would have been simpler."[9] Political power resources, however, tend to be less liquid than economic resources.[10] In short, this approach is not useful for the purpose of this paper, because it fails to take into account the "conversion process"[11] that is necessary if control over resources is to bring leverage in a given situation.

Defining power as control over outcomes[12] (power as reflected in the distribution of gain and losses to actors in outcomes of events in which they participate), however, is no less problematic. This approach is based on the assumption that power is exercised exclusively for the actors own benefit. In cases of altruistic exercise of power on behalf of powerless actors, one might then come to the wrong conclusions regarding the actual power relations.

Furthermore, this approach assumes that outcomes are shaped mainly by the actions of the actors. Thus, it fails to consider the impact of structures in determining outcomes, aside from the intention of the actors. However, as Waltz has aptly

remarked, it is important to ask "how and to what extent the structure of the realm accounts for outcomes and how and to what extent the units (actors) account for outcomes."[13] According to him, "structures have to be studied in their own right as do units . . . Failure to mark and preserve the distinction between structure, on the one hand, and units and processes, on the other, makes it impossible to disentangle causes of different sorts and to distinguish between causes and effects."[14] In sum, to define power as control over outcomes is problematic for our purposes, since it fails to consider the impact of structures, altruistic behavior, and random factors, and is unable to establish a casual link between resources, actions and outcome.

The third approach to power is more promising for our purpose here. It views power as control over actors, namely the capacity to impose one's will on others. This conception of power captures the essence of influence since it sees power as resting in the social relations between actors, and more specifically in the process by which one is able to make others conform to his will despite their possible resistance or indifference. Influence of others' behavior is based on both positive and negative inducements, and may be of either general or specific nature, i.e. circumscribed in time, place, issue-area, etc. Leverage, we would contend, is but one sub-category of influence. Leverage is defined as "manipulation of a relationship in order to coerce or induce a recipient state to conform its policy or actions to the desire of the supplier state."[15] It is usually aimed only at a specific issue or set of issues. Even more importantly, it emanates only from the threat, use, or anticipation of use of negative incentives for compliance, namely the withholding of any regularly supplied good or service.

Ongoing supply of goods and services (e.g. foreign economic and military aid, arms sales, etc.) creates the conditions in which leverage (the threat of withholding) can be exercised. Thus the supply relationship may also be viewed by the recipients as negative sanctions in disguise and a cause for apprehension, rather than as positive sanctions (and therefore, an innocent instrument of influence), which is the way the

providers of aid would like to think of it. As David Baldwin puts it "explanations of power relations should specify from whose point the situation is being viewed. In a given power relationship A may perceive himself as employing carrots, while B may perceive A as using sticks. Although many Americans perceive their foreign aid programs in terms of positive sanctions, many participants perceive it differently."[16]

Finally, leverage and influence have in common two additional characteristics that are worth noting in this context. Both are a matter of degree and both may or may not be coercive. Whether leverage or influence are coercive depends not so much on the means employed to attain compliance as on the degree of resistance by the target to that course of action. This is the case because coercion, strictly defined, refers to an attempt to overcome resistance.[17] Thus, both leverage and influence are coercive to the extent that they try to elicit from the target behavior to which he is opposed, not merely indifferent or, indeed, supportive.

Having defined and somewhat clarified the concepts of power, influence and leverage, we now proceed to examine the relationship between arms transfers and leverage. Specifically we would like to explore the kind and degree of leverage that arms suppliers enjoy over their small states customers, leverage that ultimately rests on anticipation, threat or use of arms embargoes. We are, therefore, interested in assessing the vulnerability of small states to coercive leverage that arises from their dependence on foreign sources for the supply of their weapons. We also intend to examine the alternatives open to small states to compliance with the will of foreign arms suppliers. While there are, no doubt, other determinants of leverage aside from arms transfers, and arms transfers may also be a source of other forms of influence, these may be (for the purposes of this paper) impounded in a vast ceteris paribus upon which we shall not touch in this paper.

In the following sections two competing paradigms on arms transfers and leverage will be presented, the first derived from the writings on arms transfers, the second

from the literature on economic coercion. To evaluate the contrasting perspectives offered by these two paradigms we shall introduce a multidimensional framework for analysis based on social exchange theory, then follow it with an examination of the pertinent empirical evidence. We will conclude with some thoughts on the utility of each paradigm for understanding of leverage derived from arms dependence.

III. THE ARMS TRANSFERS PERSPECTIVE

In recent years much has been written by academics (among others) on the arms requirements of small states, particularly in the Third World, and the ways in which they go about satisfying these requirements.

The motivating force behind most of the studies of arms transfers has been the conviction that some or all arms purchases by small developing countries are undesirable and the desire to find some way of controlling or limiting the spread of arms.[18] Consequently, the literature has concerned itself almost exclusively with two broad issues: (1.) the motivation of major arms producers to transfer arms, and of small states to import them or produce them indigenously, and (2.) the political, military and economic consequences of arms production, transfer, and acquisition for both the supplier and recipient nations, as well as for the international (and regional) system. The relationship between the supplying and receiving nations, and particularly the dependence created and leverage enjoyed by the former over the latter have been discussed in the literature primarily in the context of the motivation to supply/acquire arms. Limited systematic attention has been given to the actual dependence created and concomitant leverage enjoyed, and the discussion of these issues has largely been confined to some brief empirical observations and off-hand generalizations. Still, the traditional literature on arms transfers and small states does offer a coherent and widely shared view on the leverage that arms producers enjoy over their clients. Its almost unanimous view is that arms suppliers wield considerable leverage over their customers, particularly the small states.

This literature claims that arms and the global arms market have some unique characteristics that provide the basis for leverage of suppliers over recipients, namely:

1. Arms are a strategic commodity. In an anarchical international system based

on the "self-help" principle arms are essential for existence and lack any close substitutes (demand side).[19]

2. The arms market is oligopolistic in nature,[20] having only four major exporters (supply side) Political considerations (e.g. membership in a defense pact such as NATO and WTO) frequently restrict even further the already limited choice of arms suppliers.

3. Barriers to entry for new suppliers are believed to be very high in terms of capital, technology, and skilled manpower, not to mention stiff competition in marketing and the inherently lower reliability of new (and smaller) suppliers. Moreover, the establishment of an indigenous industry producing sophisticated systems in developing nations requires massive transfers of technology components from the established producers. It thus fails to eliminate the dependence on these suppliers, and may even reinforce it. At best, it may substitute one form of dependence with another (supply side).[21]

4. The lack of universal standardization of weapons systems, particularly for sophisticated systems, and the sale of exactly such systems to small developing countries, make the latter highly dependent on the initial supplier for training, maintenance, support services, and spare parts throughout the lifespan of the weapon (provided the weapons are acquired for combat or combat readiness rather than merely for prestige). Under such conditions shifting suppliers is very costly, and not only during the transition period, since significant costs also are incurred in maintaining disparate equipment in the inventory. Moreover, shifting suppliers is time consuming, and entails considerable military and political risk (vulnerability) during the transition period (supply side).[22]

5. Supply of weapons and particularly the accompanying training is said not only to create economies of regularity, but also vested interests in the political and military orientation toward the supply country. It has been claimed that "the political

orientation of an arms importing country may be deduced simply from the make of the weapons it imports".[23] Such an orientation allegedly makes a political decision to shift suppliers very problematic.

Overall, the view of the traditional literature is that arms transfers to small states "create" dependence which "of course limits the freedom of recipients to change suppliers, to play off one supplier against another, and to resist the efforts of exporters to place conditions on or extract political reform from particular arms transfers and long-term arms transfer relationship."[24] (Emphasis added)

Recent developments involving arms transfers to developing countries have begun to shake the confidence of some scholars in the hitherto unchallenged premise that arms dependence entails significant political vulnerability and provides the supplier with considerable leverage over his client(s).[25] The willingness of major arms producers to deviate from their traditional policy and provide their clients with top-of-the-line weapons systems, the Egyptian treatment of the Soviet Union (1972), and the failure of the U.S arms embargo in Turkey (1974) seemed particularly instructive in this respect.

On the more general level, many students of arms transfers have recently observed some important developments in the international system and particularly in the arms market that have significant bearing on the leverage enjoyed by arms suppliers over their customers: (1) the commercialization of arms sales owing to the growing dependence of weapon producers on exports of arms to offset balance of payment deficits, to provide employment, to reduce the cost of domestic arms purchases, to recoup research and development costs, to maintain the viability of indigenous arms industry, and to provide spin-offs for the rest of the economy; (2) the increased dependence of arms producers (particularly in the West) on oil imports from Third World countries, as well as on revenues from arms sales; and (3) the entry into the arms market of many new producers and the expansion, diversification and upgrading of

production by existing ones. All of these developments have significantly increased the competition between the arms exporter to the extent, some argue, of creating a buyer's market.[26]

These developments reduce, no doubt, the asymmetry in the dependence of arms recipients on arms suppliers in general, and on specific supplier countries in particular. Still, these developments did not take place in the abstract — other developments that have no less significance for the relationship between arms producing and receiving nations also have taken place in recent years. Moreover, there is no consensus among the scholars on the significance of the developments listed above. Some argue that the dependence relationship between suppliers and recipients has not vanished, but only become more complicated and subtle.[27] In any event, the developments noted above would seem to justify a systematic re-evaluation of the issue of leverage emanating from arms sales. Such an evaluation, however, is nowhere to be found in the arms transfers literature. This is painfully evident even in the most recent and highly acclaimed discussion of the politics of arms sales by Andrew Pierre.[28]

IV. THE ECONOMIC COERCION PERSPECTIVE

In sharp contrast to the literature on arms transfers stand the writings on economic coercion that focus on the leverage emanting from control of something of economic value. These writings have but little faith in economic coercion as an instrument of foreign policy in issues of high policy, thus suggesting that only little leverage would arise from arms sales. Let us briefly review the part of literature on economic coercion that bears upon our theoretical concerns and provides the reasoning behind these conclusions and expectations.

The study of economic coercion may have found its first systematic expression in Hirschman's classic National Power and the Structure of Foreign Trade written in the early 1940s.[29] Since then, students of economic coercion have been able to go well beyond Hirschman's initial formulation of the "power policy using foreign trade as an instrument" and "policies relying on the influence effect of foreign trade."[30] These students and particularly Galtung,[31] Knorr,[32] Gilpin[33] Doxey[34] Jentleson,[35] Hoffman,[36] Walensteen,[37] Losman,[38] and Adler-Karlsson[39] have been able to identify several conditions that are required for economic coercion to be effective, the most important of which are control over supply, inelasticity of demand, and cost of defiance in excess of the cost of compliance.

The studies of economic coercion have also addressed the question of the likelihood of success of attempts at economic coercion in the current international system. Initially, at least, the literature suggested almost unanimously and quite categorically that the conditions for success are not commonly found in the current international system and economic coercion therefore can be expected to fail in all but the most extraordinary circumstances.[40] More recently, however, a more sophisticated and discriminatory answer to this question has emerged in the literature. It suggests that assessment of the likelihood of success of economic coercion must take into

account not only the systemic conditions but also the target state's cost ratio for defiance versus compliance. This school of thought led by Klaus Knorr agrees that it is indeed extraordinarily rare for any one country to possess very high control over things of economic value. Its adherents also believe that it is highly improbable that those who possess a control over supply of a good or service will agree to the use of such control for any purpose other than derivation of monopolistic profit. Nonetheless, Knorr and his followers are convinced that even under these circumstances the cost of defiance may be sufficiently high or, alternatively, the cost of compliance sufficiently low, to favor success of economic coercion. Here is where the distinction between application of coercion in high and low policy is introduced.[41]

Application of coercion in low policy issues, according to Knorr, does not attract much public attention, and affects few if any of the vital interests of the target state. Consequently, the cost of compliance is not very high, resistance to the economic pressure by the target states is not very likely, and success of the coercion attempt is therefore at least possible, if not altogether probable. By contrast application of coercion in matters of high policy occurs across issue areas (the expected payoff is not solely economic), involves high stakes to the target state, arouses a great deal of publicity and is, therefore, characterized by a high cost of compliance. The high cost of compliance, in turn, induces fierce resistance by the target state and is likely to contribute to failure of coercive attempts.

The empirical evidence uncovered to date indeed seems to provide overwhelming support to the thesis that international economic coercion in matters of high policy is all but doomed to failure.[42] We have every reason to expect that these general findings concerning the efficacy of economic coercion in high policy issues should also hold true for the particular form of economic coercion based on arms dependence. This is the case not only because such coercion affects and attempts to influence high policy

issues, but also because arms acquisition—in and of itself—is a matter of high policy for practically every country.

By now it should be clear that the writings on arms transfers and economic coercion offer two sharply contrasting views on the issue of leverage emanating from arms sales. In order to resolve this ambivalence, improve our understanding of the issue, and bridge the gap between the two paradigms, we should establish an independent framework for analysis, then proceed to use it for testing the opposing claims and reviewing the empirical evidence. It is to this task that we now turn.

V. A FRAMEWORK FOR ANALYSIS: SOCIAL EXCHANGE THEORY

The threat or capacity to withhold or deny any regularly supplied good or service is, as we have argued earlier, the essence of leverage. The existence of trade (exchange)* between actors, and the capacity of one to deny the other a good or service, is necessary but insufficient to endow him with leverage over the other. Presence of other favorable conditions, at the bilateral system, and unit levels, is also necessary for the purpose. Let us first examine the conditions that must be met before trade (exchange) in general can become a potent lever, then proceed to determine the presence or absence of these conditions in the specific context of arms transfers.

A bilateral exchange relationship is, broadly speaking, one of mutual dependence or interdependence, since each party to the exchange is sensitive to and affected by actions taken by the other(s). This mutual sensitivity of interdependent relations is believed to be important as a source of influence and leverage primarily when it is imbalanced or asymmetrical, namely when there is a sufficient variation between the parties in the degree of their indifference to the rewards of the exchange. To quote Keohane and Nye, "it is the asymmetries in dependence that are most likely to provide sources of influence for actors in the dealing with one another."[43] Peter Blau expressed the same idea fifteen years earlier when he wrote that "interdependence and mutual influence of equal strength indicate lack of power."[44] In trade relations such asymmetrical interdependence arises primarily from variations in the levels of trade concentrations as well as commodity concentration between the trading parties.

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*For the purpose of this paper trade is considered to be in existence even if actual transactions have not yet taken place, provided the commitments to supply and receive have already been made and integrated into the planning and expectation of the partners.

Thus far we have discussed only one dimension of interdependent relations — mutual sensitivities — where sensitivity refers to the costs that one party to the interdependent relations has to bear owing to changes that take place in the other before the first party changes any of his policies.[45] Asymmetry in sensitivities between trading parties, as we have explained above, is to a large degree a function of the conditions prevailing between and within the trading units. As such it can prove an important source of influence. But interdependent relations have one additional dimension — mutual vulnerabilities — where vulnerability refers to the cost incurred by one partner to the exchange owing to changes that take place in the other after the first has already altered (adjusted) his policies.[46] Asymmetrical vulnerability turns out to be the crucial condition for leverage because it also reflects asymmetry in the relative availability and costliness of the alternatives the various actors have.[47] Vulnerability, however, does not necessarily correspond with sensitivity (and asymmetry in one does not, therefore, automatically translate into asymmetry in the other), and it is shaped not only by bilateral and unit (country) level conditions but also, and even primarily, by systemic ones (e.g. the nature of the global market for the good or service under discussion).[48] Consequently, we must also consider the systemic conditions in our analysis of leverage.

As the above discussion suggests, comprehensive and systematic assessment of leverage emanating from trade (exchange) relationship should consider conditions at the unit, bilateral, and system level. Social exchange theory, and more specifically Peter Blau's work [49] provides us with a framework for analysis of vulnerability and therefore, leverage. It stands in sharp contrast to the traditional arms transfers literature, which focuses primarily, if not solely, on bilateral and unit level conditions. Blau's framework (see below) suggests itself as most useful for the type of analysis carried out in this paper for at least one additional reason. It provides a parsimonious and exhaustive conceptualization of power, one that links its manifestations (influence and leverage) to

social exchange (i.e. trade relations).[50] In the process it illuminates the tactical courses of action that may be pursued by trade partners to diminish influence and leverage of others and to enhance their own influence/leverage over others.[51]

Some readers may wish to raise the standard criticism directed at social exchange theory, namely that its key assumption of egotistical and self-centered behavior by actors is normatively biased and unrealistic.[52] But we consider this assumption, which social exchange has in common with utilitarian and classicial economic theories,[53] as both appropriate and informative for the analysis of international politics in view of the semi-anarchical nature of the international system.

The framework for analysis of power (leverage) relationships suggested by Peter Blau, derives in part from an earlier work by Richard Emerson[54]. It can be easily operationalized. According to Blau, in order to achieve power over others, four conditions have to be met (see Table 1):

(1) one must remain indifferent to what others offer, (2) one must have a monopoly over what others need, (3) law and order must prevail, and (4) materialistic and other relevant values have to be deep rooted. Conversely defiance, according to Blau, requires that one possess one or more of the following options: one should be able to (1) provide inducement to the supplier, (2) obtain elsewhere, (3) take by force, and (4) do without.

Table 1: Requirements for Power and Alternatives to Compliance

Requirements of Power	Alternative to Compliance
Indifference to what others offer	Supply inducements
Monopoly over what others need	Obtain elsewhere
Law and order	Take by force
Materialistic and other relevant values	Do without

Source: Adapted from Peter Blau, Exhange and Power in Social Life, (New York: John Wiley and Son, 1964), p. 124.

VI. THE EXERCISE OF LEVERAGE: SYSTEM LEVEL CONDITIONS

Let us now turn to the specific context of arms transfers, and examine the leverage of arms producers over their small state clients in light of the requirements postulated above.

1. Indifference to what others offer (versus supply incentives)

Indifference of a supplier to what others have to offer is an obvious source of power, for it satisfies one of the conditions for asymmetry of dependence relations. If, however, a supplier is attracted to what his client has to offer the relationship becomes one of reciprocal exchange and approximates symmetrical dependence.

Both the traditional arms suppliers and certainly the newer ones have become, over the years, increasingly receptive to the supply incentives that arms customers have to offer. These incentives take the form of monetary rewards, oil and other raw materials, military bases, markets for manufactured goods, and/or political cooperation and support. In recent years producers have been relying increasingly (and explicitly)[55] on arms exports to secure their supply of oil. Other goals include improvement in balance of payments, hard currency earnings and employment; recovery of R&D costs; maintaining the viability of indigenous arms industry; and enhanced political support and influence. True, significant differences clearly exist between (and within) arms producing nations in the level and type of dependence on arms exports as well as in the sensitivity to supply incentives. There are also some short term variations (and even reversals) in these levels of dependence and sensitivity. Still, the long term trend is clearly toward diminished asymmetry of dependence in the relationship between arms producers and consumers, a trend that is quite apparent when one compares the current state of affairs to that which prevailed in the late 1960's and early 1970's. All other things being equal, this trend would imply that the leverage arising from weapon sales is being undercut.

Perhaps the most striking example of this trend is the PRC's arms sales policy. Following Mao's death, the PRC has identified an urgent need for economic modernization in general, and modernization of its arms arsenal in particular. To satisfy these needs, however, the Chinese required both foreign currency and modern military technology, both of which were rather scarce commodities in China. To obtain both commodities, the Chinese drastically modified their traditionally restrictive and ideologically motivated arms sales policy. They have not only increased expotentially the volume of their arms sales[56], but have also diversified their customers, to the point where they now sell military hardware to two combatants, Iran (through South Korea), and Iraq (through Egypt).[57]

2. Control of what others need (versus alternative sources of supply)

Tight control over supply of goods and services valued by others is clearly essential for economic leverage. Such control is possible through monopoly over production or marketing, or alternatively through cooperation (voluntary or involuntary) of other producers. Conversely, for defiance to become a viable strategy it is essential for the consumer to be able to obtain his needs from more than one foreign source.

While monopoly in arms production has not existed in the past few decades, the arms market has had a tight oligopolistic structure with only four major producers, two of which (the superpowers) were much larger than the others and were, in some cases, the only producers of some advanced and complex systems. Little cooperation or coordination, however, has been achieved between the major arms producers with respect to their conventional arms transfers policies. In fact, their relationship in this sphere has largely been characterized by competition rather than cooperation, something that has become increasingly evident in recent years. One facet of this growing competition between the arms producers has been their growing willingness to forego the qualitative and quantitative restrictions on sale and conditions on use that they have traditionally imposed on their arms transfers to Third World countries. This

change has drastically altered the supply conditions in the global arms market, and has been quickly reflected in the type, quantity, and quality of weapons actually purchased by small states, particularly in the Third World.

Small states have been quick to exploit for their own advantage the new supply conditions in the arms market. With increasing frequency they now play one supplier against another in order to achieve one or more of four major objectives: (a) to improve the financial terms of the deal, (b) to increase the share of the weapon system(s) that will be produced, or at least assembled in the recipient country, (c) to obtain weapon systems or components that would not otherwise be sold, (d) to remove or avoid restricitons on the future use of the weapon system purchased. Two recent examples will serve to illustrate these points.

During the negotiations for the sale of AWACS planes between the U.S. and Saudi Arabia in the late 1970s, the Saudis repeatedly used the threat of a purchase of a similar system from Britain and France (which were more than eager to sell to the Saudis) to convince the American administration and dissuade the Congressional opponents of the deal from cancelling it or imposing unacceptable conditions on the planes' use. The administration itself has used this line of argument in its attempt to overcome the opposition to the deal. Furthermore, following the approval of the deal and during a subsequent visit to Saudi Arabia by the U.S. Secretary of Defense, which was designed to conclude the negotiations for the use of the AWACS planes, the Saudis refused to grant the U.S. access to its installations (for the Rapid Deployment Force) and maintained that they could do with their American arms as they pleased since they paid for them in cash. "You are just arms salesmen", said a Saudi general, "and we pay cash."[58]

The Saudi general's remark captures one additional feature of the current arms market related to our earlier discussion. Unlike the 1950's and 1960's when most arms transfers to Third World countries provided for discounts, easy credit or barter, and in

some cases were done as outright grants, a higher percentage of the more recent transfers were straightforward sales paid for in cash.[59] S ~h deals clearly provide the supplier with a much smaller lever over his customer.

In 1980 Jordan decided to purchase a mobile SAM-6 system from the Soviet Union after it was denied a similar system by the U.S. Since then, the U.S. has made several attempts to convince the Jordanians to cancel the deal with the Soviets in return for which the U.S. will supply them with an improved mobile Hawk system (which will not be subject to the restrictions on use and deployment imposed by the Senate on the earlier Hawk system purchased by Jordan in 1976). This case, therefore, clearly underlines the improved bargaining position of developing small states vis a vis the major arms suppliers. The U.S. Secretary of Defense upon his return from Jordan acknowledged this state of affairs, when, in an attempt to win support for the sale of the mobile Hawk system, he stated that, "Jordan will buy a mobile air-defense system—the question is from whom."[60]

The competition between the major traditional suppliers of arms has been further intensified by entry into the market of many new producers/exporters (see Table 2) and the expansion, diversification and upgrading of production and sales by existing ones (see Tables 3.1 and 3.2). The number of producers/exporters of second echelon arms systems has grown dramatically over the last decade with the number of suppliers of more sophisticated systems also growing, but at a much slower pace. The entry into the arms market of these new producers has also been significant in one other important respect. By virtue of their greater dependence on arms exports to generate income and maintain the viability of their indigenous arms industry, these new producers are much less likely to impose embargoes and subject their arms sales and deliveries to other forms of political interruptions, and are, therefore, much more reliable suppliers. Thus, for example, during the Falkland Island Crisis, Israel resisted strong British pressures to curtail the supply of weapons to Argentina under existing contracts.

Table 2: Emergence of New Arms Exporters, 1970-1979

Exporting Country	Value of Exports 1970	Value of Exports 1979	Average Annual Exports 1970-74	Average Annual Exports 1975-79
Argentina	0	9	5.8	2.8
Australia	0	27	16.1	62.2
Austria	0	91	7.0	91.6
Brazil	0	55	0	60.2
Bulgaria	0	45	9.2	34.2
Finland	0	73	0	14.6
Greece	0	4	0	2.8
Hungary	0	9	8.6	17.0
Libya	0	82	1.4	23.8
North Korea	0	73	0	57.0
Norway	0	45	16.4	28.2
Pakistan	0	4	0	9.0
Portugal	0	18	1.4	25.2
Rumania	0	64	36.4	46.6
Saudi Arabia	0	229	1.2	56.0
Singapore	0	9	3.0	10.4
South Africa	0	55	2.8	23.6
South Korea	0	165	0	70.6

Source: Calculated from ACDA World Military Expenditures and Arms Transfers 1970-1979, Table II. Figures are in constant million U.S. dollars (1978).

Comments: 1. Since ACDA's arms exports statistics include only weapons already delivered, they tend to downplay the full magnitude of the expansion of arms sales by the new exporters during the 1970's. Nevertheless, notice the sharp increase in arms sales by these countries in the second half of the decade as compared to the first half. 2. The list includes arms exports based on indigenous production as well as re-exportation of systems imported by these countries. In both cases the exporting country is a source for supply of weapons.

Table 3.1: Changes in Levels of Arms Exports by Established Producers, Selected Countries, 1961-80

Exporting Country	Value of Exports 1961	Value of Exports 1970	Value of Exports 1980	Rate of Change 1961-80 (%)	Average Annual Exports 1961-70	Average Annual Exports 1971-80
USA	393	1258	3013	+666	643.0	2619.0
USSR	511	1136	3006	+488	848.0	2244.0
United Kingdom	241	185	311	+29	220.0	410.0
France	50	203	1235	+2370	146.0	751.0
China	0	22	85	---	16.0	83.0
Italy	0	43	431	---	23.0	225.0
FRG	3	10	210	+3400	17.0	109.0
Netherlands	3	10	162	+5300	8.0	66.9
Sweden	1	0	79	+7800	0.3	19.4
Canada	22	37	---	---	19.4	10.2

Source: Calculated from SIPRI Yearbook 1981, pp. 186-87. Figures are SIPRI trend indicator values as expressed in million U.S. dollars at constant 1975 prices.

Table 3.2: Changes in Levels of Arms Exports, Additional Countries, 1970-79

Exporting Countries	Value of Exports 1970	Value of Exports 1979	Percentage of Change 1970-79	Average Exports 1970-74	Average Exports 1975-79
Bulgaria	8	64	+700	58 4	125 8
Czechoslovakia	182	781	+329	289.6	671.2
GDR	16	36	+125	44.2	54.6
Israel	8	229	+2762	18.0	124.0
Japan	16	45	+181	17.0	40.6
Spain	16	55	+243	20.4	46.0
Switzerland	0	385	---	60.0	289.2
Turkey	8	9	+12	4.8	7.2
Yugoslavia	8	119	---	15.6	145.2

Source: Prepared by the authors from U.S. Arms Control and Disarmament Agency, World Military Expenditures and Arms Transfers, 1970-79.

Figures are in constant million U.S. dollars (1978).

The proliferation of conventional arms sales, particularly to the Third World, and the global spread of weapons assembly and production facilities have also substantially increased the number of potential sources of spare parts for most weapon systems in the arsenal of small states. These developments have made small states significantly less dependent for spare parts on the original supplier of the weapon system, thereby undermining one of the most critical and sensitive sources of dependence and vulnerability. Several recent historical episodes could illustrate these points.

Following the 1967 French arms embargo, Israel managed to obtain some parts for its French built systems (and particularly the Mirage planes) from Holland and other foreign sources, while it produced others indigenously. After severing its ties with the Soviet Union in the mid-1970's, Egypt succeeded in getting from China parts for its MiG's and other Soviet-built weapons systems, and later replaced key components in these systems (e.g. jet and tank engines) with superior Western equivalents. Turkey withstood fairly well a U.S. arms embargo during the same period, obtaining spare parts for its U.S. made weapons and new weapon systems from several NATO countries, particularly FRG and Italy. The Iranians have also been able to overcome a U.S. arms embargo during and after the "hostage crisis". They purchased parts for their American-built systems from a whole array of foreign sources, which apparently included Israel, Italy, Greece, Spain, North and South Korea, and Vietnam. Most recently, during the Falkland Island crisis, Argentina has apparently overcome an EEC arms embargo by acquiring the parts and supplies for its air force from other Latin American countries (Venezuela and Peru) as well as Libya and Israel.

Small states are thus able to obtain spare parts for existing weapons systems as well as brand new systems from several foreign suppliers, which often compete to sell the weapons. The establishment and growth of indigenous arms industries in the small states has opened for them another source for supply of arms, one which seems politically superior to any other source. These indigenous industries clearly fall short of

providing their countries with complete self-sufficiency in arms, and they also create some new forms of foreign dependence (e.g. on foreign technological assistance and component(s)), particularly when complex and sophisticated systems are concerned. Nevertheless, they significantly reduce the overall dependence of the country on arms imports and create a form of dependence that is much less politically inhibiting, certainly in the short run, since the need for the foreign assistance is far less urgent in nature.

3. Law and order (versus application of force and coercion)

Unlike domestic systems that are centralized and hierarchic, the international system is semi-anarchic and decentralized.[61] Whereas domestic systems possess coercive instruments to enforce law and order, the functional equivalent of law and order at the international level is certain rules that are recognized by states. These rules range from simple tacit understanding (e.g. spheres of influence) to the elaborate codification of rules governing international commerce, technical cooperation, etc.

Small states have traditionally supported international law and norms because they benefit from the formal equity, the predictability of behavior, and the limitation on the freedom of action of major powers that law provides.[62] To reap these benefits, small states themselves have to behave in accordance with international law and norms in interstate relations, and indeed their behavior in the field of weapons procurement has been traditionally characterized by conformity to international law. This is the case not only because of the general advantages that adherence to law provides, but also because illegal behavior is not a viable long-term strategy for weapons acquisition.

Actual use of force by a small state against a weapon producer is clearly ineffective to guarantee a supply of weapons over the long-run, and even under the best of circumstances it can only relieve or ease some short-term supply problem (e.g. the missile boats which Israel smuggled out of Cherbourg Harbor in France in the late 1960's). Application of other forms of coercion against arms producers is only slightly

more viable as a strategy for weapons acquisition by small states, since it is necessarily confined to only few such countries which enjoy a unique international position (e.g. Saudi Arabia), and even this unique position may not be long-lasting. Moreover, the application of force and coercion by small states against the major arms producers may be a more effective strategy for denying weapons to others than for obtaining them for oneself. Finally, it should be noted that in the few cases that small states have not abided by the law in their relations with their major arms suppliers (e.g. 1979 Iranian hostage taking), the illegal actions were not primarily motivated by the desire to obtain weapons.

4. Materialistic and other relevant values (versus do without)

A state's demand for weapons is shaped by two analytically separate but empirically interrelated factors—the external environment and the domestic conditions. The external environment has three different dimensions that affect the demand for weapons: the nature of the international system, the character of the regional subsystems, and the actions of other national units. It is only because of certain features of the current international system, however, that the other two dimensions assume any significance. These features of the international system are its decentralized and semi-anarchic nature and the lack of any central authority or any effective regulatory, allocative, and obligative mechanisms. Order in the system is maintained on the basis of the self-help principle. The nature of the system creates for states a basic security dilemma, which is reflected in and exacerbated by developments within the regions and their other national units. States attempt to resolve the security dilemma, at least in part, by maintaining their own instruments of violence, which requires, in turn, acquisition of arms.

Domestic factors provide additional stimulus for procurement of arms. These factors include, among others, domestic instability, bureaucratic politics, and pursuit of prestige for the state and its leadership. Domestic stimulus for arms acquisition

assumes particularly great significance in small non-European states where the leadership faces the difficult task of stabilizing the regime internally, as well as protecting the state's sovereignty and enhancing its prestige internationally. These tasks mandate the acquisition of at least some weapons to secure for the regime the support of the military as well as to facilitate effective suppression of domestic and foreign opposition.

Thus, for a whole array of internal and external factors, military as well as political, disarmament (and certainly unilateral disarmament) is hardly a viable strategy for states in general, and small states in particular. This fact is indeed reflected in the arms transfer statistics of the last decade,[63] which show that small states have developed an almost insatiable demand for weapons. While it may be possible for these states to do without additional weapons for a while as a temporary solution to a supply problem — until a new source of supply is found and/or developed — it is practically inconceivable that any of them would be either willing or able to forego new weapon acquisitions for a prolonged period. In this sense, the basic demand for weapons is both high and sustained. While such demand pattern is clearly significant in shaping the global arms market, it only becomes politically meaningful in terms of creation of dependence and a base for leverage under certain supply conditions (see below).

Balance Sheet

Since the basic demand for arms by small states/Third World countries is both high and sustained, the issue of whether such demands for arms creates politically significant leverage for suppliers over recipients hinges on the answers to two questions: (1) Is there more than one independent source of supply and (2) can the clients provide the producers with sufficient incentives (in the form of carrots and/or sticks) to insure supply. Both of these conditions have to exist for defiance to become a viable strategy for an arms recipient. On the other hand the absence of merely one of them may suffice to provide considerable leverage to an arms producer.

As the preceding analysis should have made clear, the answers to these questions are not categorical and absolute but rather judgmental and a matter of degree. Moreover, these answers may have to be more discriminatory, taking account of the variance in the position of the various countries within the small states/Third World group. This will be done, in part, in the next section of this paper, which shifts the analysis to the unit level. Nonetheless, it is our judgement, on the basis of the structural analysis provided above, that the general answer to both questions has clearly become yes. Consequently, we believe that overall the leverage provided by arms sales to arms producers has gone through a period of marked decline, a trend, we would argue, that is likely to continue in the foreseeable future. In fact, it may even be the case today that while the transfer of arms does not provide the supplier with much in the way of leverage, his refusal to supply may seriously undermine his position and influence.

Our conclusions are based on the observation that the changes that have taken place in the relevant variables (outlined in Blau's framework) point almost unanimously in the same direction—towards a weaker bargaining position of the arms suppliers. Global expansion and diversification of arms production and emergence of new producers have loosened the control of any individual supplier over the market, more than offsetting in the process the rise in demand for arms. Growing sensitivity of arms producers to supply incentives, coupled with their mounting dependence on arms exports, have intensified the competition between the major arms suppliers almost to the point of creating a buyers' market. A quantitative as well as qualitative proliferation of conventional arms transfers, which followed both of these developments, has rapidly increased the number of available sources not only for new weapon systems but also for spare parts, thereby weakening the "addictive effects" of arms sales.

VII. THE EXERCISE OF LEVERAGE: UNIT LEVEL CONDITIONS

Thus far we have discussed the structure of the international system, the global arms market, and their implications for the leverage that arms suppliers may enjoy over their small states recipients. To complete our analysis we must supplement the discussion of the systemic conditions with an examination of factors operating within both arms supplying and receiving nations, as these may affect the dependence (and therefore also the leverage) equation in several important ways.[64] Initially, we shall consider some factors operating on the supplier side of the equation that may impede his capacity to exploit arms exports for coercive leverage in foreign policy. We shall then turn to the recipient side of the equation and explore some domestic conditions and government policies in small states that influence their dependence on foreign sources of arms and their vulnerability to pressure from their arms suppliers.

It is well established in the literature that governments' freedom of action can be restricted by internal as well as external constraints. Much has been written in this context on the constraints on leverage that emanate from the interrelation between domestic and foreign policy objectives, as well as between foreign policy objectives themselves.[65] Here we shall focus on the impact of other internal constraints, namely domestic structures, on leverage. These can be clearly understood if we look at the strength of the state in relation to its domestic society. In this respect, the power of the state vis a vis its own society can be seen along a spectrum ranging from weak to strong.[66]

In societies with a strong state (or state-centered policy networks), policy formulation corresponds to the model of unitary government. Its unitary character permits the government to impose its policy preferences on the country as a whole over the objections of interest groups. Conversely, in societies with relatively weak states, policy networks correspond to a model of pluralistic government. Power is divided and fragmented, and authority concentrated in automonous and semi-autonomous agencies,

which are frequently captured by different interests.[67] Consequently, interest groups are able to veto and circumvent policy decisions and even control the policy-making in certain issue areas.

Thus a weak state (and a strong society) in a weapons-producing country (e.g. the U.S.)[68] seriously undermines the leverage it could otherwise possess vis a vis the foreign arms recipients because it lacks sufficient control over the resources necessary for exercise of leverage. In such countries, interest groups, such as large corporations, foreign lobby groups, labor unions, etc., which have vested interest in arms exports and exercise considerable influence over the administration, may pressure it to sell arms beyond what is perceived to be in the national interest. The interest groups may even circumvent decisions of the administration not to sell or to ban sales by selling arms through third parties. Furthermore, disagreements over arms sales policies are also possible within the state itself. Such disagreements, whether between different branches of government (e.g. the executive versus the legislative) or between different government departments (e.g. State versus Defense), further weaken the bargaining position of the state vis a vis the recipient country. Lack of cohesion within the U.S. government, for example, was instrumental in reducing the efficacy of the arms embargo imposed on Turkey (1975) following its invasion of Cyprus.

Domestic conditions and government policies are therefore important in shaping arms exports and putting them to a coercive use in foreign policy. They are as important, if not more so, in shaping the dependence of small states on arms imports, their vulnerability to suppliers' pressures based on such dependence, and their capacity to withstand/resist such pressures. In this context, it is useful to assess the impact of these domestic factors by considering a set of alternative courses of action for acquiring arms that small states may in theory pursue to ease their security dilemma.

For small states to obtain the weapons required (or perceived to be required) for their defense usually means purchasing them abroad. At the same time, however, these states are extremely reluctant to incur the political, military, or economic vulnerability

that dependence on foreign weapon suppliers may entail. Minimizing this vulnerability requires, among other things, reducing the asymmetry in their relations with their foreign weapon suppliers. Theoretically there are two ways by which these states can reduce this asymmetry without jeopardizing the supply of weapons to their defense establishment: (1) by increasing also the dependence of their weapon suppliers on them — providing these suppliers with their strategic resources — the desired outcome in this case is a more symmetrical interdependence; and (2) by reducing their dependence on any single foreign supplier of arms (and on foreign suppliers as a whole) by diversifying sources of supply, producing indigenously, and reducing their overall demand for weapons or for certain particular systems, etc. In the latter case the desired outcome is lower dependence.

The two courses of action discussed above differ in many respects, the primary difference being, perhaps, that the former increases the small state sensitivity interdependence while the latter diminishes it. Both, however, provide the small states with greater leeway, freedom of maneuver, etc. and in this sense both increase the small state's independence.* That is, if we perceive the relationship between dependence and independence as a graduated and complex continuum ranging from complete independence on the one pole to complete dependence on the other, we can argue that both courses of action push small states closer to the independence pole.

Social exchange theory approaches the dependence/independence continuum as a set of alternatives the presence (or absence) of which determines the independence (dependence) of any one actor on another for certain goods or services.[69] These

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*Independence can be operationally defined with respect to a specified set of objectives and considered to be a matter of degree. A state is said to be completely independent to the extent that its goal (or a set of goals) can be reached without resort to instrumentalities under the control of another state. Any recourse to the resources or cooperation or both of others entails a certain degree of dependence.

four conditions for independence are, according to Blau: (1) strategic resources; (2) available alternatives; (3) coercive force; (4) ideals lessening need. We would now like to consider the independence of small states in the sphere of weapons acquisition in light of these conditions.

1. Strategic Resources

Arms producers are motivated to engage in transfers to small states by two complementary clusters of factors: (1) perceptions that their support for small states will serve one or more of their global or domestic interests; and (2) desire to secure valuable resources that the small states can actually provide (or threaten to deny) them. The latter category is of particular concern to us here. As we have noted earlier, small states can provide arms producers with supply incentives in the form of monetary rewards, base rights, intelligence-gathering rights, scarce raw materials, political cooperation, combat experience for weapons systems, etc. Numerous historical examples are available for the exchange of strategic assets in return for arms. In the post-WWII period small states have consistently offered the major powers bases and other relevant rights of strategic importance in return for arms sales. Recently, Greece, Turkey, Spain, Phillipines, Somalia, and Oman have bargained with the U.S. for massive aid packages in return for basing privileges. Other countries like Egypt (1967-1973), Syria, Yugoslavia, and Morocco used the same quid pro quo to extract arms supplies from the Soviet Union.

To the traditional uses of basing facilities, a variety of relatively new technological functions have been added. These functions, such as electronic intelligence gathering as well as communications and surveillance, have created considerable demand for strategic access to the territory of others. Other important strategic resources for inducing suppliers to provide arms are combat performance data of weapon systems, captured weapon systems, and raw materials. As for the former, Israel has traditionally provided the U.S. captured Soviet weapon system, as well as

combat experience with American-made systems, in exchange for American military hardware and software. In regard to the other, oil has been the most frequently sought strategic resource in arms deals (e.g. Soviet arms transfers to Iraq, U.S. transfers to Saudi Arabia, French arms transfers to Libya, Iraq, and the Persian Gulf countries, etc.) Political cooperation may also become a valuable asset in the hands of small countries. Keohane, for example, has shown that "... lesser allies have not only been able to act independently; they also have been able to use alliances to influence American foreign policy and to alter American perspectives."[70]

Small states can use the strategic resources at their disposal for both rewards and sanctions (actual or threatened). Both uses enhanced their bargaining position vis a vis the arms producers. Still, the possession of strategic resources is not automatically equivalent to influence, since certain other factors impinge on the translation of resources into influence. The intervening variables include, among others, the attributes of the state as well as systemic conditions. Certain attributes of small states such as the "intensity of interests"[71] and "concentration on a small number of issues" as well as "greater cohesion"[72] provide them with significant advantages in the process of political bargaining. Other factors such as systemic conditions and skill of negotiation do not necessarily favor the small state, at least not indiscriminately so. Evaluation of their impact, therefore, requires that we distinguish between the various types of strategic resources and also consider the conditions unique to each case, a task that lies outside the scope of this paper. Here we shall only attempt to evaluate the impact of systemic conditions on the capacity of small states to exchange political cooperation and bases for arms.

Are systemic conditions conducive for translating base rights into reverse influence? The existing literature offers some conflicting answers to this question. Handel, in particular, argues that the need of great powers to secure permanent presence in small states territory "has declined in the missile age because the value of

such bases has depreciated."[73] This view, therefore, suggests that systemic conditions do not favor the small states, at least so far as base rights are concerned.

Two other views, however, came to the opposite conclusion by placing greater emphasis on other functions that bases perform. Kemp and Miller argue that "because intelligence-gathering is such a high priority activity and because the bases are very sensitively located and are thus harder to replace than other types of bases, the pressures on a supplier government to use whatever instruments necessary, including arms, to maintain its intelligence gathering facilities will become more intense."[74] Certain technological developments in weaponry, coupled with limitations of reconnaisance satellites and resistance to on-site inspection, necessarily increase the importance of intelligence bases for verification purposes (by national technical means) even during a peaceful period of arms control negotiations/agreements.

R. Harkavy makes the same point with respect to the importance of bases, by looking at another function that bases perform, one of a traditional geopolitical nature. As he puts it:

> "Resource shortages, both existing and expected—most notably in oil but involving numerous other commodities—have served to focus renewed attention on real or hypothetical requirements for protecting sea lanes and for controlling maritime checkpoints and on the importance of staging areas for military intervention contingences."[75]

The value of political cooperation of small states is similarly affected by systemic conditions Here, however, there is practically a consensus among the scholars that the value of such cooperation in the eyes of the superpowers increases substantially during periods of tension and global competition, not to say confrontation, between the superpowers.[76] This held true for the bipolar system in the "cold war" era and also seems to be the case in the current period of faltering detente between the superpowers. In both of these periods the superpower have employed arms transfers as a foreign policy instrument designed to secure new political allies or maintain existing ones.

All in all, the conclusion seems to be that at least some forms of strategic resources have either been all along or "have become important tangible items of exchange, providing considerable leverage for smaller states in bargaining over military and economic aid."[77]

2. Available alternatives

The availability of alternative sources from which a needed service can be obtained is a second condition for independence. In this respect, the systemic conditions seem to favor the independence of small states. As we have already argued above, the world market for arms has become highly competitive in recent years due both to the increase in the number of major weapons suppliers and their willingness, indeed eagerness, to sell arms This suggests that states have the following alternatives for weapons' acquisition: they may purchase weapons from one or several suppliers, and these may be located either domestically or abroad. Four primary strategies ("ideal types") for weapons procurement are therefore possible (see Table 4).

Each of these strategies entails costs and benefits of political, economic and military nature. The time frame also is important in considering the relative merits of each alternative, as short term benefits may offset long-term costs and vice versa. We turn now to a discussion of these strategies.

A. Indigenous Production (Strategy Types III, IV)

Strategy types III and IV emphasize domestic arms production. Both aim at autarky. By autarky, we mean complete independence of research, development, production and maintenance of all needed (desired) weapons systems. Strategy IV (diversification among domestic suppliers) in its "ideal" form, however, is hardly viable for small states,* and we shall, therefore, focus on strategy III (total domestic concentration).

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* Some very partial exceptions are provided by Israel and Sweden, which have in certain areas two or more indigenous products which are competing with each other.

Table 4.: Strategies for Weapons Acquisition: Four "Ideal Types"

Location of Production	Number of Suppliers: One	Number of Suppliers: Several
Foreign	Total Foreign Concentration (Type I)	Diversification Among Foreign Suppliers (Type II)
Domestic	Total Domestic Concentration (Type III)	Diversification Among Domestic Suppliers (Type IV)

The benefits of complete self-reliance in weapons acquisition are rather substantial.

— Indigenous arms production and maintenance promotes a nation's independence in pursuing policies, or at least confers on it a freedom of maneuver that will not be otherwise available. Hence, small states can use their weapons when, where, and how they want.

— Small states reduce the risk (and concomitant fear) of cutoffs, embargoes or slowdown in supply of new systems and spare parts whether deliberate or accidental.

— Some important channels of penetration by suppliers into the state and the society of "client" countries are blocked.

— Small states by virtue of designing and manufacturing their own weapon systems can maximize their fit to the specific military needs and the social, political, and economic conditions of the particular country, rather than to those of the supplying country, which is the case with imported arms.

— Indigenous arms production in a small state is also bound to be more sensitive to the priorities of production of the country's military. This factor assumes great significance during a time of crises when an indigenous arms industry is apt to respond to the urgent needs and adjust its production accordingly.

— Arms industry in a small state, particularly when it is partially or wholly government owned (which is usually the case), enables the country to maintain secret military R&D, production and acquisition, if it so desires.

— Arms production in a small developing country may have considerable domestic political significance as a source of national pride and manifestation of sovereignty, and it may even earn that country some prestige abroad.

— Production of arms in a small state may be an economically viable enterprise, particularly when the production is of weapons systems for which economies of scale are not critical. These may also be important spillover effects on the rest of the economy.[78] While the domestic market is rather small for most military systems,

successful exports of such systems will provide the country with much needed revenues and hard currency, and may even reduce the actual cost of the systems purchased by its own military. The political reliability of small states as weapon suppliers only enhances their attractiveness and chances for success in exporting weapons.

— Arms industry in a small state may prevent a substantial "brain drain" and may be used as a tool for regional development.[79]

— Even when indigenous arms production in the Third World entails dependence on imported technology, it does reduce the vulnerability of the country to foreign pressures, particularly during a time of crisis, and enhances its freedom of maneuver.

But while the benefits associated with autarky are both numerous and diverse, this course of action also entails very high costs, which usually prove prohibitive for the small state:

— Arms production in a small state, particularly if it is accompanied by indigenous R&D, requires allocation of resources (capital and skilled labor) that in developing nations are usually rather scarce. Consequently, indigenous production may introduce severe distortions to the economy in general, and to civilian industry in particular.

— In managing their security dilemma, the most up-to-date weapons may make a crucial difference for small states, in deterrence as well as in combat operations. Resource constraints on indigenous arms production, however, may prohibit or at least delay the procurement of exactly these systems.

— The size of the domestic arms market in the small state makes the cost of production and procurement of weapon systems very high compared to their cost of similar systems mass produced abroad. Such high costs may thus force much smaller procurement programs than would otherwise be possible and desirable. Attempts to reduce costs of R&D and production by increasing production lines through exports not only face considerable difficulties in view of the stiff competition in the global market,

but, to the extent that they succeed, create foreign dependence, which the country was trying to avoid in the first place.

— Reducing the costs of indigenous production by importing technology is not easy to do (particularly with respect to the most sophisticated systems), and when done entails some dependence and is susceptible to cutoffs, etc.

To sum up, the benefits of type III and IV strategy are great, but the costs are overwhelming, and mounting, the closer a small state approximates autarky. Autarky, in the sense of complete independence of external help is, therefore, for all practical purposes, an elusive goal for a small state that needs to maintain a modern well-equipped military force. Still, the empirical evidence suggests that the resolve to free itself from the strings attached to arms transfers definitely pushes a small state farther toward autarky that would be justified on the basis of purely economic consideration. Table 5 shows quite clearly that since the 1960s developing small states have been moving at an ever-increasing pace toward indigenous production of major arms systems. Not only has the number of developing small states engaged in indigenous arms production grown dramatically since the 1960s, but many of these states have also moved to higher stages of production* (e.g. from maintenance and licensed production to independent R&D) and diversified the production to include a variety of naval, aerial, armor and missile systems.[80]

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*The pattern of development of small state's arms industries apears to be rather uniform both cross-nationally and for different weapons systems. Five distinct developmental stages have been identified. The first stage involves the assembly of arms under license. In the second stage the small states begin to produce weapon components under license. The third stage of domestic arms production involves production of complete weapons systems under license. In the fourth stage small states reproduce, through reverse engineering, or modify and redesign weapons systems. In the fifth and final stage, small states domestically design and produce weapons systems.

Table 5

Number of Developing Countries Producing Aircraft, Naval Vessels, Armored Vehicles, Missiles by Type, State and Year

	1980		1970		1960	
	Producing Countries By Stage 1 2 3 4 5	Total Producing Countries	Producing Countries By Stage 1 2 3 4 5	Total Producing Countries	Producing Countries By Stage 1 2 3 4 5	Total Producing Countries
Fighters	1 3 2	5	1 1	1	1	1
Trainers-jet	1 2 1	3	3 1	4	1 1	2
Trainers-basic	1 4 2 4	11	1 3	4	1 2 3	5
Maritime Reconaissance	1 1	2				
Transports	1 2 1 3	7	1 2	3	1	1
Helecopters	5 4 3	11	1 1	2		
Aircraft Engines	2 4 1	5	1 1	2	1	1
Avionics	1 2	3				
Total Producing Countries		16		7		6

Table 5 (continued)

	1980		1970		1960	
	Producers Per Stage 1 2 3 4 5	Total Producers	Producers Per Stage 1 2 3 4 5	Total Producers	Producers Per Stage 1 2 3 4 5	Total Producers
Frigates	4 1	4	1	1	1	1
Corvettes	1	1	1	1	2	2
Patrol Craft	1 10 2 12	20	3 1 7	11	3 1 4	8
Submarines	2 1	3				
Mine: Warfare Forces			1	1		
Amphibious Craft	1 2	3	2	2	1	1
Support Craft	1 6	7	4	4	1 5	6
Total Naval Vessel Producers		25		15		13
Tanks	1 2 2	5	2	2		
Armored Personnel Carriers	3 1 2	6				
Armored Cars	1 1	2	1 1	2		
Reconnaissance	2	2				
Armored Bridgelayer	1	1				
Total Armored Vehicle Producers		6		4		

Table 5 (continued)

	1980							1970						
	Producers Per Stage						Total Producers	Producers Per Stage						Total Producers
	1	2	3	4	5	5.5		1	2	3	4	5	5.5	
Surface-to-air			4		1	1	5							
Air-to-ground						3	3							
Air-to-air			2	2		1	5			1				1
Surface-to-surface			1	2		1	3						1	1
Anti-tank			4	1		2	7			1				1
Total Missile Producers							9							3

Table 5 (continued)

Stages of Demonstrated Manufacturing Capabilities

1. Licensed Assembly
2. Licensed Component Production
3. Licensed System Production
4. System Modification/Reverse Engineering
5. Dependent R&D and Production

5.5 Independent R&D and Production

P. Planned

Source: Andrew Ross, Arms Production in Developing Countries: the Proliferation of Conventional Weapons (Santa Monica, Calif.: Rand Corporation, N-1615-AF, October 1981), pp. 16-19.

B. Single Foreign Source (Strategy Type I)

Type I strategy involves total concentration on a single foreign supplier meeting all the arms needs of the small state . It, therefore, implies complete dependence. The small state had hardly any production or even assembly facilities to speak of, much less an indigenous military R&D capacity. Complete dependence nonetheless has some attractions for a small state, economic benefits being paramount:

— It is extremely efficient to maintain and operate a standardized modern military force (economies of standardization), which in today's world usually means purchasing the equipment from a single source. Standardization of military equipment also has clear operational advantages as it eases the logistical problems associated with maintenance of readiness as well as carrying out combat operations.

— Arms procurement from a single supplier may also have certain economic advantages, as the supplier may reward the customer with preferential treatment in the terms of the deals (delivery priority, prices, financing, etc.).

— The intimate political ties that frequently accompany arms supply relationship of a small state with a single foreign country are a potential source for "reverse influence." They may well commit the arms supplier to support his client well beyond what he would be inclined to do in the absence of such a relationship. One reason for this "reverse influence" is that the performance of the weapons supplied to the small state also affects the prestige of the producing country. There are considerable commercial, political and military benefits to be reaped from the successful demonstration of the efficacy of his weapons and there are analogous costs in case of their failure to perform adequately.

Still, the various benefits of maintaining a single foreign supplier of arms come at a high cost (actual and potential) to the small state:

— The weapons purchased from the foreign supplier will not be perfectly suited to the recipient country's conditions and needs, as usually they will not be tailored-

made to its requirements. This factor is bound to hamper the efficiency and reliability of these systems when in the small states use, resulting in indirect costs that can be very significant.

— It is very costly for a small state to alter established arms supply relations with a single foreign supplier. The process of switching suppliers is long, arduous, and potentially risky. It may entail considerable vulnerability in the transition period and impose high costs during both the transition period and after the process is completed (when the problem then becomes maintenance of disparate equipment in the arsenal). This state of affairs makes a small state, which is totally dependent on a single foreign arms supplier, susceptible to pressures to make political, military or economic concessions or face embargoes on spare parts and new systems.

— Viewed from the perspective of the small state, intimate military ties with a single foreign supplier may have certain undesirable side effects. In particular, the training of its military personnel in or by the supplying country is likely to provide that country with additional influence in the small state, influence that not desirable for the national interest of the latter.

All in all, it would seem that for a small state, complete dependence on a sole foreign arms supplier (Type I Strategy), while economically desirable and politically viable, is hardly desirable because of the political costs and risks involved. The empirical evidence suggests that small states share this view and actively seek to avoid complete reliance on a single foreign supplier if they can only help it.

As Table 6 demonstrates, the number of states that are completely dependent upon a single supplier has declined in recent years from twenty-eight to fourteen. This fifty percent decline in vulnerability dependence still may be a conservative estimate since the arms transfer figures used in this study (from ACDA) refer only to actual deliveries and not to orders or commitments. More recent data pertaining to orders and negotiations for the supply of arms indicate further strengthening of small states' efforts to reduce their dependence on single suppliers of arms.[81]

C. Diversification Among Foreign Suppliers (Type II Strategy)

The third major alternative in arms acquisition, one that is somewhere between autarky on the one hand, and complete dependence on the other, is diversification of the sources of weapon supply (via the spreading of military dependence over a number of supplying countries). This alternative may or may not include some indigenous arms production in the small state. Either way, it enhances the recipient state's freedom of action in a number of ways.

— The recipient country need not be overly concerned about military sanctions or threats thereof from any single supplier. By the same logic any one of the country's suppliers is less inclined to threaten or impose embargoes as they may not only be ineffective but also are likely to be counter-productive (completely eliminate his influence and market in the recipient country).

— The competition between arms producing countries enables the small state to play them one against the other and thus improve the terms of the arms deals it finally concludes.

— Diversification may prevent the development of a military elite "penetrated" by any one supplier country.

Diversification of sources of supply of arms, as attractive as it may seem to the small states, does not come without costs:

— It minimizes but does not eliminate the risks and consequences of cutoffs and the problems associated with them. Only one supplier needs to refuse to provide spare parts for some damage to be caused to the country's military preparedness.

— Maintenance of disparate systems in the weapon arsenal is more costly and cumbersome, and therefore may reduce the military preparedness in peace time and combat performance in war.

— Diversification cannot completely free the small state from the "addictive effects" of arms deals i.e. — "back-end problems." While the country may buy the arms

Table 6: Countries* Highly Dependent (over 80%**)

Upon a Single Foreign Arms Supplier

1965-1974	1975-1979
Algeria	Bulgaria
Australia	Czechoslovakia***
Bolivia	Cuba
Bulgaria	Ethiopia
Czechoslovakia	GDR
Cuba	Hungary
Egypt	Israel***
Ethiopia	Jordan
Finland	Korea (South)
GDR	Laos
Greece	Mali
Hungary	Oman
Iraq	Taiwan
Israel	UAE
Korea (South)	Uganda
Kuwait	Yemen (Aden)
Laos	Yugoslavia***
Mali	
Phillipines	
Poland	
Rumania	
Somalia	
Syria	
Taiwan	
Thailand	
Turkey	
Yemen (Aden)	
Yugoslavia	

Source to Table 6: Prepared by the authors from ACDA data.

*Countries with insignificant arms imports (less than $20 million annually) were not included.

**ACDA's arms imports figures refer only to deliveries, not orders or commitments and exclude training, construction, and technical services.

***Considerable indigenous arms production capability.

it desires from one of several suppliers, once the deal has been concluded it can usually get its spare parts only from the original supplier.

— Pursuing a conscious policy of purchasing weapons from several suppliers does not encourage any of them to give the recipient country preferential treatment, nor does it provide for any meaningful "reverse influence."

— Diversification policy may not be a viable strategic for every small state. Some "pariah" states may not be able to find more than one willing and able supplier.

With all the drawbacks of diversification counted, it still seems that a measure of diversification among foreign sources, coupled with some indigenous production, is the most attractive option for small states, as it reaps most of the benefits of strategies II and III, without incurring many of their costs. As was suggested above, the empirical evidence suggests that many countries indeed pursue this course of action (modified Type II/III strategy) by diminishing their dependence on a single foreign source (Table 6) and establishing indigenous arms industries (Table 5).

It should be noted that small states have one additional tactical alternative for managing their arms dependence: they can change their suppliers with relative ease in order to improve their bargaining position and avoid threatened or actual manipulation of their vulnerability. The empirical evidence suggests that in sharp contrast with the assumptions of the arms transfers literature, small states have indeed pursued this option (see Table 7.1 and 7.2), irrespective of the "addictive effects" of arms sales (i.e. "back-end" problems) and the other costs involved in making such changes.

3. Coercive Force

A third major condition for independence, according to Blau's scheme is coercive force. As Clausewitz already has made clear, "power is made up of two components," the sum of available resources and the "strength of the will."[82] The will of small states to use their resources for the purpose of sanctions is instrumental for exercise of

"reverse leverage" and for translating strategic resources into arms supply. The Saudi Arabian linkage of oil production (output and price) to arms sales in the recent negotiations on the sale of five AWACS planes is a case in point.

Still, applying coercive force to obtain arms is not a typical alternative for a small state. This is the case not only because some of these states do not possess any strategic resources that they could use coercively, but also because they are mostly inhibited from using their resources at the expense of the arms suppliers owing to certain important "deterrent linkages."[83] Theoretically the small states that have strategic resources at their disposal could use them for their advantage, and at the expense of the arms supplier, on any given issue. In practice, however, they must usually refrain from doing so for fear that if they push their advantages too far the supplier can retaliate and thereby "wipe them out."[84]

Thus, Turkey for example, in an apparent attempt to coerce the U.S. to lift the arms embargo imposed on Turkey in 1975, threatened to close permanently the American bases in Turkey and to withdraw from NATO entirely But in practice the "deterrent linkages" discussed above prevented Turkey from "closing" more than five out of the twenty-six U.S. bases.[85] Even in the bases that were "closed," operations relating to NATO, and not purely to the U.S., were continued under "Turkish" command.[86] It is striking, however, that in this case even limited action by Turkey proved effective in convincing the U.S. to lift its arms embargo.

Still, the fact that small states are mostly inhibited from using their strategic resources at the expense of the arms suppliers does not mean that small states cannot employ other means of coercion, since they can exploit favorable systemic conditions. Thus, for example, since both superpowers feel it is in their best military and political interests to prevent nuclear weapons proliferation, small states may try to exchange case, they can threaten to "go nuclear" if they fail to obtain conventional arsenals in restraint in the pursuit of the nuclear option for goods and services they desire. In this

Table 7.1: Changes in Principal Foreign Arms Supplier 1965-1979.

(ACDA data base)

Country	Old Supplier	New Supplier
Argentina	US	Others**
Bangladesh	USSR	Others**
Brazil	US	OK
Chile	UK	Others**
Cyprus	USSR	Others**
Denmark	US	FRG
Egypt*	USSR	France
Ecuador	US	France
Ethiopia*	US	USSR
Finland	USSR	Others**
Kuwait	UK	US
Laos*	US	USSR
Libya*	France	USSR
Morocco	US	France
Mexico	US	UK
Nicaragua	US	Others**
Peru*	Canada	USSR
Singapore	UK	US
Sudan*	USSR	FRG
Tanzania	China	USSR
Tunisia	US	Others**

Source: Prepared by the authors from U.S. Arms Control and Disarmament Agency, World Military Expenditures and Arms Transfers, 1970-1979 and 1965-1974.

*Block Changes

**This category does not include major suppliers such as U.S., USSR, France, UK, FRG, Italy, Poland, Canada.

Table 7.2: Other Changes in Principal Arms Suppliers 1965-1981

Country	Old Supplier	New Supplier
Cambodia	United States	China
Congo	France	USSR
Israel	France	US
North Yemen	USSR	US
Somalia	USSR	Others

Sources: Michael Mihalka, "Supplier-Client Patterns in Arms Transfers: The Developing Countries 1967-76" in Stephanie G. Neuman and Robert E. Harkary, (eds.), Arms Transfers in the Modern World, (New York: Praeger, 1979), p. 73. Also data collected by the authors.

sufficient quality and quantity to address their sources of insecurity.[87] For the threat to be credible, however, some actual or potential nuclear capability is a condition sine qua non.

This logic may explain, in part, why Israel has never denied its capability to produce nuclear weapons. M. Handel claims that Israel's ambiguous nuclear weapons policy aims in part at ". . . the improvement of its bargaining position in purchasing weapons from a reluctant power interested in non-proliferation."[88] According to Handel, in 1966 Israel agreed to allow inspection of its nuclear reactor in Dimona, apparently in exchange for an American agreement to supply Israel with A-4 airplanes.[89] Handel and others suggested that Israel actually used the threat of a nuclear strike against the Arabs during the 1973 war in an attempt to pressure the U.S. to launch an airlift of military supplies to Israel.[90] Statements by Turkish politicians during the period of U.S. embargo that Turkey might go nuclear[91] could be interpreted in the same light, although Turkey at the time lacked the actual technological base to realize the threat within a short period. It would seem that Pakistan and Taiwan, and perhaps even South Africa are currently using the same threat to go nuclear in order to obtain conventional weapons, and are doing so with far greater credibility.

The linkage between the production of nuclear weapons and the supply of conventional ones, and the kind of bargaining position it provides the small state has been most explicit in the context of American-Pakistani relations. President Zia ul-Haq has publicly committed himself to refrain from producing nuclear weapons in return for a massive American aid package. The U.S. has agreed to provide Pakistan with a 3.2 billion dollar in aid, including, among other things, 40 ultra-modern F-16 fighter-bombers.[92] The U.S. Department of Defense nonetheless tried to equip the Pakistani planes with somewhat inferior electronic counter-measures (ALA-46 (v)-3) than those available in their American counterparts (ALR-69), reasoning that "the U.S. will not risk its most advanced technology when there is no need to do so."[93] The

Pakistanis, however, felt so confident of their bargaining position that in November 1982 they refused to take delivery of the F-16s unless they were equipped with the most sophisticated electronic countermeasures, and the U.S. quickly gave in to the Pakistani demands.[94]

4. Ideals Lessening Needs

Absence of any need for weapons constitutes an alternative to compliance and a fourth condition for independence. As we have already noted, however, defense nihilism is not a realistic option for most small states for a variety of military and political reasons. The question, therefore, arises, what viable alternatives do exist for small states to defend themselves against an external attack with the minimum of foreign dependence. Blau's idea of ideas lessening need is an obvious solution. It may be interpreted here to mean adoption of a military doctrine that places as little emphasis as possible on external assistance in matters of national security.

A strategy of dissuasion through denial seems particularly well suited for the purpose of reducing the dependence of small states on foreign powers in security matters. This strategy, unlike strategies emphasizing punishment or disarming attacks (pre-emption), does not call for the use of large military units and/or complex ultra-sophisticated equipment. While the denial strategy also permits the use of certain large and sophisticated weapon systems (e.g. air-defense systems, terrain denying weaponry), these systems do not play a key role in the strategy. As Horst Mendershausen puts it:

> "in the configuration of the whole effort small units of weaponry play relatively important roles, weapons that can be widely distributed among home defense forces, that can be employed by the defense forces without causing indiscriminate devastation, that can be maintained and replenished by recourse to the resources of domestic society. The development and refinement of weapons of this kind may be called the work of Small Technology, not small in the sense of primitive, but in the sense of being more on the human scale."[95]

Certain new technologies such as Precision Guided Munitions (PGMs) permit the substitution of technology for manpower, as well as the substitution of cheaper defensive weapons for large numbers of expensive tanks and aircraft. Thus, they seem to have the potential of providing a small state with adequate security while drawing on fewer large complex and expensive weapon systems, thereby enhancing their independence.[96] Moreover, by permitting substitution of technlogy for manpower these systems also make it possible to rely on more domestic sources and fewer imported ones. Typical examples of the use of this kind of strategy are provided by countries like Sweden, Yugoslavia, Norway, Switzerland etc.[97]

Balance Sheet

Our analysis of unit level conditions in this section strongly reinforces the conclusions of the preceding section (which examined systemic conditions) regarding the leverage that suppliers may derive from arms transfers to small states. It does so by pointing out that small states possess three viable strategies for reducing their overall vulnerability to economic coercion stemming from their dependence on foreign sources of arms for leverage purposes. First, they may change their military strategy to one requiring fewer modern and sophisticated weapons, thereby diminishing their overall degree of dependence. Second, they may use the strategic resources at their disposal to lure arms suppliers, thus reducing the asymmetry in their dependence by creating more interdependent relations with their arms suppliers. A third possible strategy for small states is to pursue policies of diversification of foreign suppliers and indigenous arms production. The latter two policies do not eliminate the dependence on foreign sources, they only change its form from vulnerability to sensitivity dependence. Let us elaborate this last point.

Diversification of foreign arms sources does not eliminate the overall degree of dependence on foreign arms sources, it merely spreads the dependence over a large

number of suppliers. This, in turn, reduces the likelihood that any one of the small state's arms suppliers can gain, by himself, sufficient control over supply to manipulate the dependence in a meaningful way. Since several independent suppliers are usually willing and able to provide most small states with the weapons they desire, and cooperation of all the relevant suppliers in sanctions against a small state is hard to come by, diversification is a viable and quite effective strategy for reducing vulnerability in a relatively short time. Indigenous arms production, on the other hand, is necessarily a longer term strategy for reducing any vulnerability dependence.[98] Again, it does so not by eliminating foreign dependence but by changing its form, this time by spreading dependence over time. It substitutes dependence on imported complete weapon systems and spare parts with dependence on imported technology and components, thereby also replacing short-term vulnerability to coercive leverage by long-term sensitivity. This latter form of dependence is much less constraining for small states' freedom of action.

VIII. THE EFFICACY OF ARMS EMBARGOES

Even when systemic and unit conditions do not favor the exercise of leverage by arms suppliers over their small state recipients, the former may still enjoy very significant leverage over the latter through perceptual mechanisms. Specifically, apprehensions and misperceptions of small states about the consequences of arms cutoffs may lead them to comply with the will of the supplier through anticipation even when the supplier makes no attempt to apply coercion.[99] Since such apprehensions and misperceptions can be deeply rooted, they may not be immediately affected by changes in the external environment.[100] Over the long run, however, they are more than likely to change when confronted repeatedly with conclusive contradictory evidence. Thus, if it could be conclusively demonstrated that repeated incidents of economic coercion, including arms embargoes have largely been ineffective and have only inflicted limited cost on small states, misperceptions on the issue will become less likely as times goes on, undermining in the process also this source of leverage. Let us, therefore, turn to consider the past track record of economic coercion attempts in general, and arms embargoes in particular.

The use of economic warfare in the form of trade embargoes, blockades and other types of sanction in the post World War II era, has been quite widespread in relations between smaller and greater powers as well as between the superpowers. Much has been written to explain this frequent resort to economic warfare. Most of the literature on the topic points to the expansion of global trade and to the dimunition in the utility of military force and the rise in the cost of its applications (in relations between the major powers and between the major powers and the smaller ones, if not between the smaller ones themselves) as creating both the conditions and the motivation to employ economic warfare to advance ones' interests.[101] The relative

inexpensiveness of trade sanctions (at least in terms of human lives) has increased their attractiveness in the eyes of the policy makers.

Whatever the reasons for the popularity of economic warfare among policy makers, one thing is abundantly clear—the frequency of its use should not be construed as an indicator of its effectiveness as an instrument of foreign policy. Economic warfare is practiced for a whole array of reasons ranging from the desire to modify behavior of a target state to the need to appease domestic and foreign constituencies, or enhance political support of the leadership. Only part of these reasons are related to foreign policy. Furthermore, the efficacy of economic coercion as a tool of foreign policy is critically dependent on the capacity of the sender state (by itself, or in cooperation with others) to control the supply (embargo) and/or demand (boycott) in the market for one or more good or service that is vital to the target state. But such control over the market is extremely hard to attain in most cases. In many cases, therefore, the sender state does not expect to attain and exercise such control, in others it does not even intend to do so, and in still others it both intends and attempts but fails. Consequently, the overall success record of economic coercion, when measured in terms of the actual impact on the flow of goods or services to or from a target country, has been rather dismal.

Economic coercion in the specific context of arms transfers to small states has not fared much better. Despite the nature of the demand for arms, their strategic importance and unique features as a commodity (creating "addictive effects"), and the presumed oligopolistic structure of the global arms market, arms embargoes have largely failed and in more than one respect. First, and probably most fundamental, arms embargoes have failed to curtail or severely interrupt supply of arms and spare parts to the target states even when this indeed was the goal of the embargo. This pattern holds true even for embargoes that were imposed on "pariah states" like South Africa, Rhodesia, Chile and Israel. In recent years only Chile has encountered

considerable difficulties because of an arms embargo in obtaining the weapons it desired. But even it now seems to have overcome these problems without a noticable change in the policy that brought about the embargo in the first place. This failure of arms embargoes to affect the supply of weapons to the target states can be directly attributed to the lack of cooperation with the embargoes from all the major arms suppliers, as well as the lack of support for them within these supplying countries. The strong determination of small states to free themselves from vulnerability in this area, mainly through diversification of foreign sources and indigenous production, has also contributed its share to the failure of these embargoes.

Arms embargoes have proven unsuccessful in one additional respect. They have largely been ineffective in bringing about a desired change in policy in the target state. While it is, no doubt, difficult to establish a causal link between an arms embargo (or any other trade sanction for that matter) and a change in policy in the target state, an absence of such change is a clear indication of the ineffectiveness of the embargo, and this has more often that not been the case. Moreover, some arms embargoes have not merely failed but in some cases may have even backfired in a variety of ways e.g., by consolidating the public support behind the government of the target state, pushing it toward greater intransigence and entrenchment and even accentuating its unfavorable policies toward the sender state, as an assertion of national sovereignty. The American arms embargo against Turkey (1974-78), and the Turkish reprisals in closing some American military bases without modifying their policies in Cyprus are one example. It should be noted that all of these repercussions of embargoes for the sender state do not even take into consideration the other types of costs it is likely to incur due to its action (the imposition of the embargo), such as loss of revenues and reputation for reliability as supplier.

The confidence in these conclusions regarding the inefficacy of arms embargoes is reinforced when they are put to a difficult test, namely when they are found to hold

true even for cases where the conditions were most unfavorable for such an outcome. Specifically, arms embargoes have failed even in circumstances in which they would be expected to succeed, namely, when the countries subjected to an arms embargo were engaged in combat and war, a time when the demand for spare parts and additional weapons is greatest and the vulnerability to an arms embargo is consequently the highest. The failures of the French arms embargo on Israel in 1967, and the American and European embargoes on Iran in 1980-81 and Argentina in 1982 are particularly instructive in this respect. The dismal success record of past embargoes, coupled with the global proliferation of weapons, spare parts, and production facilities, thus give us a strong reason to believe that in the foreseeable future, arms embargoes will be a highly ineffective tool of diplomacy in all but the most exceptional circumstances. Moreover, the failure of past embargoes goes a long way toward undermining the credibility and, therefore, also the impact of any threats of future embargoes, which in turn may well deter arms suppliers from using them in the first place.

IX. CONCLUSIONS

It is common knowledge that arms transfers to small states are motivated to no small degree by the desire of the supplier to gain influence and leverage over the recipient. Whether arms transfers indeed succeed in attaining this goal, however, is still very much of an open question, for in this area, like so many others, numerous complex and incompletely understood factors, many of them beyond the control of the supplier, govern the translation of intent into reality. A review of the literature relevant to arms transfers on leverage has revealed two schools of thought, with coherent but seemingly contradictory answers to the above question. One school of thought, traditionally paramount in the arms transfer literature, suggesting that arms transfers to small states indeed provide leverage to the supplier(s). The other school of thought, one that dominates the economic coercion literature, providing strong reasons to doubt that this is actually the case.

To analyze the competing claims of the two schools of thought we have looked in some detail at the factors that affect the translation of arms imports into meaningful dependence leverage. We first introduced a framework for analysis borrowed from sociology (social exchange theory), then proceeded to examine in its light the pertinent theoretical considerations and empirical evidence on several levels of analysis. In following this procedure we both deviated from and complemented most previous studies of the leverage issue, which have largely addressed it inductively through analysis of the motivation for, and consequences of, specific historical instances of arms transfers.

Our analysis points out rather conclusively that over the last two decades profound changes have taken place in the global arms market as well as in the conditions within both arms supplying and receiving nations, and consequently also in the relationship between the former and the latter. As a result of these changes the

conditions prevailing in today's world hardly seem conducive for deriving leverage from arms transfers to small states.[102] The deeply ingrained motivation of small states to resist coercive pressures of foreign powers can therefore manifest itself, without incurring prohibitive costs, in actual defiance of the will of the arms suppliers. Under such conditions defiant behavior by small states is not only possible but even probable, particularly when one considers the dismal success record of past embargoes. This record of failure diminishes even the possibility that arms suppliers would enjoy leverage through cognitive-perceptual factors, namely through apprehension and anticipation of arms embargoes. We hasten to add, however, that significant variation does exist between small states with respect to variables relevant to leverage and defiance. A definitive answer on the vulnerability of each individual small state to coercive leverage of its arms supplier(s) and any prediction of behavior in this context must take account of the particular circumstances of the nation involved.

Based on the analysis carried out in this paper we can also conclude, with some confidence, that the economic coercion literature provides much better insight into the leverage emanating from arms sales than the writings on arms transfer. Here, however, some caveats are in order. First, the arms transfers literature concerns itself not only with leverage but also with other forms of influence produced by arms transfers to small states. Only the leverage issue, however, has been systematically analyzed in this paper, and our conclusions should not therefore be construed as providing a definitive answer on the other issues as well. Second, while we consider the traditional literature on arms transfers to small states highly inaccurate and even misleading on the leverage issue, we do not mean to dismiss it as either irrelevant or useless. We would, however, argue that the arms transfer literature, while dynamic on the descriptive level, has been rather static on the theoretical one, failing to evaluate systematically the implications for the leverage issue of many developments it has so perceptively observed. Had these writers done so, they would have, no doubt, reached different

conclusions on the issue, and the conclusions of some modest attempts that have recently proceeded in this direction indeed demonstrate the point.[103]

Finally, we believe that our paper can contribute to better understanding among policy makers, of the leverage that can be derived from arms transfers to small states. This would hopefully lead to more realistic appreciation of the limitations of arms embargoes among the arms suppliers and consequently lead to more selective use of this instrument of diplomacy as well as to seriously challenge the leverage rationale for arms sales. As for the small states, they can possibly find a reassuring message in our conclusion, namely, that they need not be overly concerned about the political repercussions of arms dependence on foreign sources, provided they are willing to implement some modestly precautionary measures. They can probably interpret our conclusions to mean that they may pursue domestic and foreign policies that are essentially independent of their arms suppliers.

FOOTNOTES

1. The term "small state" has a long tradition of usage in the international relations literature. Niels Armstrup, however, in a thorough review of the literature on small states, concluded that no satisfactory definition has been presented so far. The literature offers basically five approaches to the problem of the definition of small states. First, some authors totally reject the possibility of definition because of the insufficiencies of the concept of small state as an analytical tool. Typical of this approach is the work of Peter Baehr. A second group of scholars tries to avoid the entire problem of definition, either because it seems irrelevant to them or because it is impossible to solve. Authors in this category include Annette Baker Fox, V. Sveics, Mario Hirsh, and I. Mathisen. A third approach that is common in the literature tries to link some measurable characteristics such as population, area, gross national product, armed forces, etc., to the small state concept. This approach has been adopted by, among others, Peter Wiles, Ronald Barston, Simon Kuznets, J. Rapaport, E. Mateba, and J. Therattil. A fourth group concentrates on size as a perceptual issue. According to this approach, states that perceive themselves as small are by definition small. The work of R. Keohane and R. Rothstein, falls in this category. A fifth approach tries to integrate elements of the above-mentioned approaches by combining some of the criteria that these approaches employ. Two authors have been particularly successful in this task, R. Vayrynen and M. Handel. This approach is also shared by the authors. Thus, for the purpose of this paper, we have used a heuristic definition of small states, one consisting of three elements: (1) low rank/status as measured by either objective (hard) or subjective (perceptual) data, (2) limited economic and military capability, which suggests vulnerability to external threats, and (3) limited scope of interests. This working definition considers as small states both developing and developed countries.

   The full citations for the works mentioned above are: Niels Amstrup, "The Perennial Problem of Small States," Cooperation and Conflict, (January, 1976); Peter R. Baehr, "Small States: A Tool for Analysis?" World Politics, 27, (April 1975); Annette Baker Fox, The Power of Small States (Chicago: University of Chicago Press, 1967); V.V. Sveics, Small Nation Survival: Political Defense in Unequal Conflict (Jericho, N.Y.: Exposition Press, 1970); Mario Hirsch, "La situation internationale des petits etats," Revue Francaise de Science Politique, 24 (197)4; Trygve Mathiesen, The Functions of Small States in the Strategies of Great Powers (Oslo: Universitetsforlaget, 1971); Peter Wiles, "The Importance of Country Size: A Question but not a Subject," unpublished paper (1978); Ronald P. Barton (ed.), The Other Powers: Studies in the Foreign Policies of Small States, (London: George Allen & Unwin, 1973); Simon Kuznets, "Economic Growth of Small Nations," in A.G. Robinson (ed.), Economic Consequences of the Size of Nations (New York: St. Martin's Press, 1960); Jacques Rapaport, Ernest Mateba and Joseph Theratill, Small States and Territory: Status and Problems (New York: UNITAR Studies, 1971); Robert O. Keohane, "Lilliputians' Dilemmas: Small States in International Politics," International Organization, 23 (Spring 1969); Robert L. Rothstein, Alliances and Small Powers (New York: Columbia University Press, 1968); Raimo Vayrynen, "On the Definition and Measurement of Small States," Cooperation and Conflict, 6 (1971); and Michael I. Handel, Weak States in the International System (London: Frank Cass, 1981).

2. For a bibliography of the more important contributions to the literature on power, see Robert A. Dahl, "Power," International Encyclopedia of the Social Sciences, (New York, 1969), XII: 414-15.

3. Dorwin E. Cartwright, "A Field Theoretical Conception of Power," in Cartwright (ed.) Studies in Social Power (Ann Arbor: University of Michigan Press, 1959), p. 187.

4. This approach is endorsed, among other, by such a diverse group as Hobbes, the philosophers of natural right, Hegelian thinkers, and modern quantitative political scientists. See, for example, H.A. Simon, "Notes on the Observation and Measurement of Political Power," Journal of Politics, 15 (November 1953), pp. 500-516; William Molesworth (ed.), The English Works of Thomas Hobbes (London, 1839), vol. 1, De Corpore, chap. 10 and 25; vol. 3, Leviathan, chap. 10; J. David Singer and Melvin Small, "The Composition and States Ordering of the International System: 1815-1840," World Politics 18 (January 1966), pp. 232-82.

5. This approach can be found in Locke, Weber, Blau and Dahl, to mention just a few. For a good discussion of this approach, see C.J. Friedrich, Constitutional Government and Democracy, rev. ed., (Boston: Ginn & Co., 1950), pp. 17-19; R.J. Mokken and F.N. Stockman, "Power and Influence as Political Phenomena," in Brian Barry (ed.), Power and Political Theory (London: John Wiley, 1976), pp. 41-43.

6. This approach has been proposed by Backrach and Baratz and was first articulated by Coleman. For a good summary and defense of this approach, see Jeffrey Hart, "Three Approaches to the Measurement of Power in International Relations," International Organization, 30 (Spring 1976) pp. 296-305. See also James S. Coleman, The Mathematics of Collective Action, (Chicago: Aldine, 1973); Peter Abell (ed.), Organizations As Bargaining Influence Systems, (New York: Halsted Press, 1975).

7. Arnold Wolfers, Discord and Collaboration: Essays on International Politics (Baltimore: The Johns Hopkins Press, 1962), p. 105.

8. David Baldwin, "Power Analysis and World Politics: New Trends versus Old Tendencies," World Politics, 31 (January 1979), p. 166.

9. Ibid., p. 165. See also Robert O. Keohone and Joseph S. Nye, Power and Interdependence: World Politics in Transition (Boston: Little, Brown, 1977), p. 50.

10. Robert Keohone, "Theory of World Politics: Structural Realism and Beyond," paper prepared for delivery at the 1982 Annual Meeting of the American Science Association, 2-5 September 1982, Denver, Colo. p. 35; Baldwin, "Power Analysis."

11. Baldwin, "Power Analysis," 163.

12. See footnote 6.

13. Kenneth Waltz, Theory of International Politics, (Reading, Mass.: Addison-Wesley, 1979), p. 78.

14. Ibid.

15. Thomas Wheelock, "Arms for Israel: The Limit of Leverage," International Security, 3 (Fall 1978), pp. 123-37.

16. David A. Baldwin, "The Power of Positive Sanctions," World Politics, 24 (October 1971), p. 24.

17. Virginia Held, "Coercion and Coercive Offers," in J. Poland Pennock and John W. Chapman (eds.), Coercion (Chicago: Aldine, 1972), pp. 50-51. See also Michael D. Bayles, "A Concept of Coercion," in ibid, pp.17-24

18. See for example, Lucy Wilson Benson, "Turning the Supertanker: Arms Transfers Restraint," International Security, 3 (Spring 1978); Anne Hessing Cahn and Joseph J. Kruzel "Arms Trade in the 1980s" in Cahn, Kruzel, Downings, and Huntzinger, Controlling Future Arms Trade (New York: McGraw-Hill, 1977) pp. 99-101. Barry M. Bleckman, Janne E. Nolan, and Alan Platt, "Pushing Arms," Foreign Policy, 46 (Spring 1982).

19. See, for example, Richard Burt, Developments in Arms Transfers (Santa Monica, Calif.: Rand Corporation, 1977).

20. Andrew Pierre, The Global Politics of Arms Sales (Princeton, N.J.: Princeton University Press, 1982), pp. 13-14.

21. Peter Dawkins, "Conventional Arms Transfers and Control," in Cahn, et al., Controlling Future Arms Trade; Cahn and Joseph Kruzel, "Arms Trade in the '80's," in ibid, p. 92; Burt, Developments in Arms Transfers, p. 7.

22. Burt, Developments in Arms Transfers pp. 15-19; David Gompert and Alexander Vershbow, "Introduction: Controlling Arms Trade" in Cahn, et al., Controlling Future Arms Trade, pp. 7-8.

23. John Stanley and Maurice Pearton, The International Trade in Arms (New York: Praeger, 1972), p. 7.

24. Gompert and Vershbow, "Introduction: Controlling Arms Trade," p. 7.

25. Geoffrey Kemp with Steven Miller, "The Arms Transfers Phenomenon," in Andrew Pierre, Arms Transfers and American Foreign Policy (New York: New York University Press, 1978), p. 68; William H. Lewis, "Political Influence: The Diminished Capacity," in Stephanie Neuman and Robert Harkavy, (ed.), Arms Transfers in the Modern World, (New York: Praeger Press, 1979), pp. 188-191; Michael Moodie and David Harvey, "Third World Arms Production: An End to Embargoes?," Defense and Foreign Affairs Digest, VI, (August 1978); Thomas Wheelock, "Arms for Israel: The Limits of Leverage," op. cit., pp. 123-137.

26. Cahn and Kruzel, "Arms Trade in the 1980's," pp. 31, 71.

27. Michael Moodie, "Defense Industries in the Third World: Problem and Promises," in Stephanie Neuman and Harkavy, Arms Transfers in the Modern World pp. 300-305; Andrew Ross, Arms Production in Developing Countries: The Proliferation of Conventional Weapons (Santa Monica, Calif.: Rand Corporation, N-1616-AF, October 1981), pp. 27-28.

28. Pierre, Global Politics of Arms Sales pp. 14-18; and "Arms Sales: The New Diplomacy," Foreign Affairs 60 (1981-2), pp. 226-36.

29. Albert Hirschman National Power and the Structure of Foreign Trade, exp. ed. (Berkeley: University of California Press, 1980).

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103. See footnote 25.

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